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2664

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Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 8, 10 – 23, 25 – 38, 40 - 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster et al. (US 6822957 B1) in view of Fijolek et al. (US 6577642 B1).

Regarding claims 1, 31, Schuster et al. disclose the limitation of a method, memory medium for configuring an IP telephone, comprising: receiving an identifier from the IP telephone (column 3, lines 20 – 32; column 6, lines 9 – 18; column 8, lines 45 – 50; column 10, lines 23 – 32); determining if the identifier is valid (column 8, lines 52 – 55); and if the identifier is valid, assigning a range of port numbers to the IP telephone based on the identifier, wherein the IP telephone is operable to use at least a subset of the range of port numbers to send or receive IP communications (column 11, lines 1 – 12; column 16, lines 13 – 20). Schuster et al. do not disclose expressly determining if a MAC ID for the IP telephone is valid; if the MAC ID is determined to be valid. Fijolek et al. disclose the limitation of determining if a MAC ID for the CM is valid; if the MAC ID is determined to be valid (Fig. 9B, element 208; column 14, lines 11 – 14; Table 4, element CHADDR 132; column 16, lines 43 – 52; Table 9; column 20, lines 66 – 67; column 21, lines 12 – 30). It would have been obvious to one of ordinary skill in the art at the time the invention was

made to modify Schuster et al. to include determining if a MAC ID for IP telephone is valid; if the MAC ID is determined to be valid such as that taught by Fijolek et al. in order to provide a variety of service offerings via and through a data-over-cable system, an exemplary data-over-cable system with telephony return includes customer premise equipment (e.g. a customer computer), a cable modem, a cable modem termination system, a cable television network, a public switched telephone network, a telephony remote access concentrator and a data network (e.g. the Internet). The cable modem termination system and the telephony remote access concentrator together are called a “telephony return termination system (as suggested by Fijolek et al., see column 5, lines 4 – 5; column 1, lines 65 – 67; column 2, lines 1 – 7).

Regarding claims 2, 17, 32, Schuster et al. disclose the limitation of the method, system of claimed wherein said range of port numbers comprises ports which are not reserved for use by other IP protocols (Fig. 2, Fig. 3; column 11, lines 50 – 55; column 12, lines 31 – 43; column 16, lines 13 – 20).

Regarding claims 3, 15, 18, 30, 33, 45, Schuster et al. disclose the limitation of the method of claimed further comprising: mediating IP communications between the IP telephone and an IP device, wherein the IP telephone uses at least a subset of the range of port numbers to send or receive said IP communications (column 13, lines 14 – 21; column 16, lines 13 – 20).

Regarding claims 4, 6, 19, 34, 21, 36, Schuster et al. disclose the limitation of the method, system of claimed, wherein said mediating the IP communications comprises: receiving a data packet from the IP telephone, performing a network address persistent

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port translation (NAPPT) on the data packet (Fig. 9, column 15, lines 32 – 47); and sending the data packet to the IP device (column 16, lines 46 – 49).

Regarding claims 5, 20, 35, Schuster et al. disclose the limitation of the method, system of claimed wherein the data packet comprises a private source IP address, a source port number, and destination information associated with the IP device, wherein the private source IP address comprises a private IP address of the IP telephone, and wherein the source port number comprises a port number in the assigned range of port numbers (column 3, lines 20 – 32; column 8, lines 45 – 50; column 10, lines 23 – 32; column 16, lines 13 – 20); and wherein said performing a network address persistent port translation (NAPPT) on the data packet comprises changing the private source IP address to a public source IP address while leaving the source port number unchanged, and wherein the public source IP address and the source port number may be used to uniquely identify the IP telephone (Fig. 9, column 15, lines 32 – 47; column 16, lines 13 – 20).

Regarding claims 7, 22, 37, Schuster et al. discloses the limitation of the method, system of claimed wherein the data packet comprises a public destination IP address, a destination port number; and source information associated with the IP device, wherein the destination port number comprises a port number in the assigned range of port numbers, and wherein the public destination IP address and the destination port number may be used to uniquely identify the IP telephone (column 3, lines 20 – 32; column 8, lines 45 – 50; column 10, lines 23 – 32; column 16, lines 13 – 20); and wherein said performing a network address persistent port translation (NAPPT) on the data packet comprises using

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the public destination IP address and the destination port number to uniquely identify the IP telephone, and changing the public destination IP address to a private destination IP address while leaving the destination port number unchanged, wherein the private IP address comprises an IP address of the IP telephone (Fig. 9, column 15, lines 32 – 47; column 16, lines 13 – 20).

Regarding claim 16, Schuster et al. disclose the limitation of a system for performing IP telephony, comprising: a network (Fig. 1, column 5, line 16 – 24); an IP telephone (Fig. 1, element 22, column 5, lines 24 – 26); a Service Gateway, wherein the Service Gateway is operable to couple to the IP telephone through the network (column 6, lines 23 – 25); wherein the IP telephone is operable to send an identifier to the Service Gateway; wherein the Service Gateway is operable to: receive an identifier from the IP telephone; determine if the identifier is valid; and if the identifier is valid, assign a range of port numbers to the IP telephone based on the identifier; wherein the IP telephone is operable to use at least a subset of the range of port numbers to send or receive IP communications (column 8, lines 52 – 55; column 11, lines 1 – 12, column 16, lines 13 – 20). Schuster et al. do not disclose expressly determining if a MAC ID for the IP telephone is valid; if the MAC ID is determined to be valid. Fijolek et al. disclose the limitation of determining if a MAC ID for the CM is valid; if the MAC ID is determined to be valid (Fig. 9B, element 208; column 14, lines 11 – 14; Table 4, element CHADDR 132; column 16, lines 43 – 52; Table 9; column 20, lines 66 – 67; column 21, lines 12 – 30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schuster et al. to include determining if a MAC ID for the CM is valid; if the MAC ID

is determined to be valid such as that taught by Fijolek et al. in order to provide a variety of service offerings via and through a data-over-cable system. And exemplary data-over-cable system with telephony return includes customer premise equipment (e.g. a customer computer), a cable modem, a cable modem termination system, a cable television network, a public switched telephone network, a telephony remote access concentrator and a data network (e.g. the Internet). The cable modem termination system and the telephony remote access concentrator together are called a "telephony return termination system (as suggested by Fijolek et al., see column 5, lines 4 – 5; column 1, lines 65 – 67; column 2, lines 1 – 7).

Regarding claims 8, 23, 38, Schuster et al. disclose the limitation of a method, system for configuring an IP telephone, comprising: receiving an identifier from the IP telephone (column 3, lines 20 – 32; column 8, lines 45 – 50; column 10, lines 23 – 32). Schuster et al. does not disclose expressly the method, system of claimed wherein the identifier comprises a vendor class identifier. Fijolek et al. disclose the limitation of the method, system of claimed wherein the identifier comprises a vendor class identifier (column 10, lines 60 – 67; column 11, lines 5 – 9; column 11 – 12, Table 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schuster et al. to include of the method, system of claimed wherein the identifier comprises a vendor class identifier such as that taught by Fijolek et al. in order to provide a variety of service offerings via and through a data-over-cable system, an exemplary data-over-cable system with telephony return includes customer premise equipment (e.g. a customer computer), a cable modem, a cable modem termination system, a cable

television network, a public switched telephone network, a telephony remote access concentrator and a data network (e.g. the Internet). The cable modem termination system and the telephony remote access concentrator together are called a "telephony return termination system (as suggested by Fijolek et al., see column 5, lines 4 – 5; column 1, lines 65 – 67; column 2, lines 1 – 7).

Regarding claims 10, 25, 40, Schuster et al. disclose the limitation of a method, system for configuring an IP telephone, comprising: receiving an identifier from the IP telephone (column 3, lines 20 – 32; column 8, lines 45 – 50; column 10, lines 23 – 32). Schuster et al. does not disclose expressly the method, system of claimed wherein said identifier is comprised in a DHCP discover message, the method further comprising: issuing a DHCP offer to the IP telephone if the identifier is determined to be valid, wherein the DHCP offer comprises DHCP lease information based on the validated identifier; the IP telephone issuing a DHCP request in response to the issued DHCP offer; storing the DHCP lease information in response to the issued DHCP request; the IP telephone storing the DHCP lease information; and the IP telephone enabling DHCP settings comprised in the DHCP lease information. Fijolek et al. disclose the limitation of the method, system of claimed wherein said identifier is comprised in a DHCP discover message, the method further comprising: issuing a DHCP offer to the IP telephone if the identifier is determined to be valid, wherein the DHCP offer comprises DHCP lease information based on the validated identifier (Fig. 13, elements 270, 278, 280, 282, 286; column 25, lines 40 – 63); the IP telephone issuing a DHCP request in response to the issued DHCP offer; storing the DHCP lease information in response to the issued DHCP request; the IP telephone

storing the DHCP lease information; and the IP telephone enabling DHCP settings comprised in the DHCP lease information (Fig. 13, elements 300, 302, 308, 312, 318, 322, 320, 324; column 25, lines 40 – 63; column 26, lines 44 – 64). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schuster et al. to include of the method, system of claimed wherein said identifier is comprised in a DHCP discover message, the method further comprising: issuing a DHCP offer to the IP telephone if the identifier is determined to be valid, wherein the DHCP offer comprises DHCP lease information based on the validated identifier; the IP telephone issuing a DHCP request in response to the issued DHCP offer; storing the DHCP lease information in response to the issued DHCP request; the IP telephone storing the DHCP lease information; and the IP telephone enabling DHCP settings comprised in the DHCP lease information as that taught Fijolek et al. in order to provide a variety of service offerings via and through a data-over-cable system, an exemplary data-over-cable system with telephony return includes customer premise equipment (e.g. a customer computer), a cable modem, a cable modem termination system, a cable television network, a public switched telephone network, a telephony remote access concentrator and a data network (e.g. the Internet). The cable modem termination system and the telephony remote access concentrator together are called a “telephony return termination system (as suggested by Fijolek et al., see column 5, lines 4 – 5; column 1, lines 65 – 67; column 2, lines 1 – 7).

Regarding claims 11, 12, 26, 27, 41, 42, Schuster et al. disclose the limitation of the method, system of claimed, wherein the range of port numbers and information indicating operational software for the IP telephone (column 5, lines 55 – 67; column 13, lines 14 –

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21; column 16, lines 13 – 20), the method further comprising: the IP telephone executing the indicated operational software to enable said IP communications (column 13, lines 14 – 21; column 16, lines 13 – 20; column 6, lines 3 – 23). Schuster et al. do not disclose expressly the method, system of claimed wherein said DHCP lease information. Fijolek et al. disclose the limitation of the method, system of claimed wherein said DHCP lease information (column 24, lines 40 – 67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schuster et al. to include of the method, system of claimed wherein said DHCP lease information such as that taught by Fijolek et al. in order to provide a variety of service offerings via and through a data-over-cable system, an exemplary data-over-cable system with telephony return includes customer premise equipment (e.g. a customer computer), a cable modem, a cable modem termination system, a cable television network, a public switched telephone network, a telephony remote access concentrator and a data network (e.g. the Internet). The cable modem termination system and the telephony remote access concentrator together are called a “telephony return termination system (as suggested by Fijolek et al., see column 5, lines 4 – 5; column 1, lines 65 – 67; column 2, lines 1 – 7).

Regarding claims 13, 28, 43, Schuster et al. disclose the limitation of a method, system for configuring an IP telephone, comprising: receiving an identifier from the IP telephone (column 3, lines 20 – 32; column 8, lines 45 – 50; column 10, lines 23 – 32). Schuster et al. do not disclose expressly the method of claimed wherein said issuing the request for the operational software comprises issuing a read request to a file transfer server, wherein said file transfer server performs said providing the operational software to

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the IP telephone (column 9, lines 32 – 35; column 25, lines 65 – 67; column 26, lines 1 – 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schuster et al. to include the method of claimed wherein said issuing the request for the operational software comprises issuing a read request to a file transfer server, wherein said file transfer server performs said providing the operational software to the IP telephone such as that taught Fijolek et al. in order to provide a variety of service offerings via and through a data-over-cable system, an exemplary data-over-cable system with telephony return includes customer premise equipment (e.g. a customer computer), a cable modem, a cable modem termination system, a cable television network, a public switched telephone network, a telephony remote access concentrator and a data network (e.g. the Internet). The cable modem termination system and the telephony remote access concentrator together are called a “telephony return termination system (as suggested by Fijolek et al., see column 5, lines 4 – 5; column 1, lines 65 – 67; column 2, lines 1 – 7).

Regarding claims 14, 29, 44, Schuster et al. discloses the limitation of a method, system for configuring an IP telephone, comprising: receiving an identifier from the IP telephone (column 3, lines 20 – 32; column 8, lines 45 – 50; column 10, lines 23 – 32). Schuster et al. does not disclose expressly the method, system of claimed wherein the file transfer server comprises a TFTP (Trivial File Transfer Protocol) server (column 9, lines 32 – 35; column 25, lines 65 – 67; column 26, lines 1 – 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schuster et al. to include of the method, system of claimed wherein the file transfer server comprises a TFTP (Trivial File Transfer Protocol) server such as that taught by Fijolek et al. in order to

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provide a variety of service offerings via and through a data-over-cable system, an exemplary data-over-cable system with telephony return includes customer premise equipment (e.g. a customer computer), a cable modem, a cable modem termination system, a cable television network, a public switched telephone network, a telephony remote access concentrator and a data network (e.g. the Internet). The cable modem termination system and the telephony remote access concentrator together are called a “telephony return termination system (as suggested by Fijolek et al., see column 5, lines 4 – 5; column 1, lines 65 – 67; column 2, lines 1 – 7).

Response to Arguments

3. Applicant's arguments filed 11/10/2005 with respect to claims 1 – 8, 10 – 23, 25 – 38, 40 - 45 have been fully considered but they are not persuasive.

Regarding claims 1, 16 and 31, Applicant argues references Schuster et al. and Fijolek et al. do not teach ‘determining if a MAC ID for the IP telephone is valid; if the MAC ID is determined to be valid, determine if the identifier is valid’. Examiner contends Fijolek et al. disclose and teach ‘determining if a MAC ID for the IP telephone is valid; if the MAC ID is determined to be valid, determine if the identifier is valid’ (see Fijolek, Fig. 9B, element 208; column 14, lines 11 – 14; Table 4, element CHADDR 132; column 16, lines 43 – 52; Table 9; column 20, lines 66 – 67; column 21, lines 12 – 30).

Regarding claim 8, Applicant argues references Schuster et al. and Fijolek et al. do not teach or disclose ‘a vendor class identifier’, and applicant notes, for example, that the vendor class identifier recited in claim 8 is a standard DHCP option (specifically, option

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#60). Examiner contends Fijolek et al. disclose and teach a vendor class identifier' which is the 'vendor ID' (column 26, lines 1 – 20, Table 10; element 'Vendor ID'; column 10, lines 60 – 67; column 11, lines 5 – 9; column 11 – 12, Table 1). Applicant also quotes that the vendor class identifier recited in claim 8 is a standard DHCP option (specifically, option #60). However, Applicant disclosed information 'the vendor class identifier recited in claim 8 is a standard DHCP option (specifically, option #60)' is incorrect (see Applicant's Specification, page 21).

However, it is obvious to one of ordinary skill in the art at the time the invention was made the MAC (Media Access Control) address is a 6-byte hex number (e.g., 00-20-AF-ED-97-A5) coded and installed by the manufacturer of the Ethernet hardware. The first 3 bytes are a unique Vendor ID for the manufacturer. The last 3 bytes may be the card's incremental serial number.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6958992 B2 to Lee et al. describe a method and apparatus for registering IP phones with an IP phone switch using access codes or personal identification numbers for authentication and for associating directory numbers to MAC addresses of IP phones.

US 6877042 B2 to Tawil et al. provide a method and system include reading a media access control (MAC) address associated with a network interface card (NIC). A fiber channel device associated with the NIC is then identified. A world wide name for

identified fiber channel is then generated by appending a vendor specified identifier assigned to the fiber channel device to the MAC address obtained from the NIC.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ACL

Jan 30, 2006


Ajit Patel
Primary Examiner